

1638

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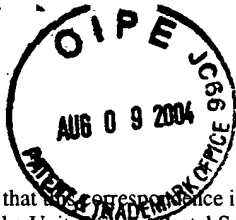
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| TRANSMITTAL FORM (to be used for all correspondence after initial filing) | Application Number | 09/771,009 | |
| | Filing Date | January 25, 2001 | |
| | First Named Inventor | Steven P. Holzberg | |
| | Group Art Unit | 1638 | |
| | Examiner Name | Georgia L. Helmer | |
| Total Number of Pages in This Submission | 14 | Attorney Docket Number | 60-017200US |

| ENCLOSURES (check all that apply) | | |
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| Authorization to Charge Deposit Account Please charge Deposit Account No. 50-0893 for any additional fees associated with this paper or during the pendency of this application, including any extensions of time for consideration of the documents enclosed. | | |
| Remarks | | |

| SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT | |
|--|---|
| Firm or Individual name | Paul Littlepage, Reg. No. 48,581, Quine Intellectual Property Law Group, P.C. |
| Signature | |
| Date | August 4, 2004 |

| CERTIFICATE OF MAILING | |
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QUINE INTELLECTUAL PROPERTY LAW GROUP, P.C.

By *Amelia Weintraub*
Amelia Weintraub

Attorney Docket No. 60-017200US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Steven P. Holzberg, et al.

Application No.: 09/771,009

Filed: January 25, 2001

For: **CYTOPLASMIC INHIBITION OF GENE
EXPRESSION AND EXPRESSION OF A
FOREIGN PROTEIN IN A MONOCOT
PLANT BY A PLANT VIRAL VECTOR**

Examiner: Steven P. Holzberg

Art Unit: 1638

REPLACEMENT SEQUENCE LISTING

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Sir:

Applicants respectfully submit the enclosed Sequence Listing to replace the sequence listing previously submitted on March 11, 2004.

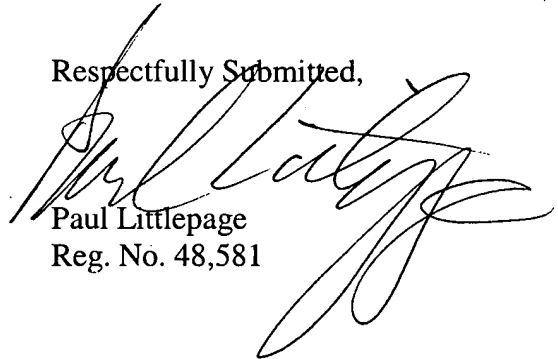
REMARKS

This replacement sequence listing merely corrects a typographical error in the previously submitted Sequence Listing, and therefore introduces no new matter. A replacement Computer Readable Form (CRF), as well as a paper copy of the sequence listing, is enclosed.

The correction appears on page 6, in SEQ ID NO: 39. The field indicating the number of nucleotides (field <211>) has been corrected to read "32" instead of "33."

The undersigned hereby states that the Sequence Listing submitted concurrently herewith does not include matter which goes beyond the content of the application as filed and that the information recorded on the diskette submitted concurrently herewith is identical to the written Sequence Listing.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read 'Paul Littlepage', is written over the typed name and registration number.

Paul Littlepage
Reg. No. 48,581

QUINE INTELLECTUAL PROPERTY LAW GROUP, P.C.
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Fax (510) 337-7877



60-017200US sequence listing.txt

SEQUENCE LISTING

<110> HOLZBERG, STEVEN P.
POGUE, GREGORY P.

<120> CYTOPLASMIC INHIBITION OF GENE
EXPRESSION AND EXPRESSION OF A FOREIGN PROTEIN IN A MONOCOT
PLANT BY A PLANT VIRAL VECTOR

<130> 60-017200US

<140> 09/771,009

<141> 2001-01-25

<160> 74

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 17

<212> PRT

<213> Coxsackie virus

<400> 1

Asn Phe Asp Leu Leu Lys Leu Ala Gly Asp Val Glu Ser Asn Pro Gly
1 5 10 15
Pro

<210> 2

<211> 20

<212> PRT

<213> Coxsackie virus

<400> 2

Gln Leu Leu Asn Phe Asp Leu Leu Lys Leu Ala Gly Asp Val Glu Ser
1 5 10 15
Asn Leu Gly Pro
20

<210> 3

<211> 20

<212> PRT

<213> Coxsackie virus

<400> 3

Gln Leu Leu Asn Phe Asp Leu Leu Lys Leu Ala Gly Asp Val Glu Ser
1 5 10 15
Asn Pro Arg Pro
20

<210> 4

<211> 20

<212> PRT

<213> Coxsackie virus

<400> 4

Gln Leu Leu Asn Phe Asp Leu Leu Lys Leu Ala Gly Asp Val Glu Ser
1 5 10 15
Asn Pro Gly Pro
20

60-017200US sequence listing.txt

```

<210> 5
<211> 20
<212> PRT
<213> Cocksackie virus

<400> 5
Gln Thr Leu Asn Phe Asp Leu Leu Lys Leu Ala Gly Asp Val Glu Ser
 1             5             10             15
Asn Pro Gly Pro
                20

<210> 6
<211> 20
<212> PRT
<213> Cocksackie virus

<400> 6
Gln Leu Leu Asn Phe Asp Leu Leu Lys Leu Ala Gly Asp Val Glu Ser
 1             5             10             15
Asn Pro Gly Pro
                20

<210> 7
<211> 20
<212> PRT
<213> Cocksackie virus

<400> 7
His Tyr Ala Gly Tyr Phe Ala Asp Leu Leu Ile His Asp Ile Glu Thr
 1             5             10             15
Asn Pro Gly Pro
                20

<210> 8
<211> 20
<212> PRT
<213> Cocksackie virus

<400> 8
His Tyr Ala Gly Tyr Phe Ser Asp Leu Leu Ile His Asp Val Glu Thr
 1             5             10             15
Asn Pro Gly Pro
                20

<210> 9
<211> 20
<212> PRT
<213> Cocksackie virus

<400> 9
Tyr His Ala Asp Tyr Tyr Lys Gln Arg Leu Ile His Asp Val Glu Met
 1             5             10             15
Asn Pro Gly Pro
                20

<210> 10
<211> 19
<212> PRT
<213> Cocksackie virus

<400> 10
Gln Leu Leu Asn Phe Asp Leu Leu Lys Leu Ala Gly Asp Val Glu Ser
 1             5             10             15

```

Asn Pro Gly

<210> 11
 <211> 28
 <212> DNA
 <213> Barley stripe mosaic virus

 <400> 11
 cttcttccgt tgctagctaa aaaaaaaa 28

 <210> 12
 <211> 21
 <212> DNA
 <213> Barley stripe mosaic virus

 <400> 12
 agttacttct tgaatttctc c 21

 <210> 13
 <211> 39
 <212> DNA
 <213> Barley stripe mosaic virus

 <400> 13
 tatagcgcgc atttaaattg gtcttcctt gggggaccg 39

 <210> 14
 <211> 49
 <212> DNA
 <213> Saccharomyces cerevisiae

 <400> 14
 tatgctagct gattaattaa gtcgacgagc tgatttaaca aattttaac 49

 <210> 15
 <211> 44
 <212> DNA
 <213> Saccharomyces cerevisiae

 <400> 15
 tatgctagct gagcggccgc gcacgtgtca gtcctgctcc tcgg 44

 <210> 16
 <211> 46
 <212> DNA
 <213> Barley stripe mosaic virus

 <400> 16
 tatactagtt taattaagtc gaccatggct agcaaaggag aagaac 46

 <210> 17
 <211> 44
 <212> DNA
 <213> Barley stripe mosaic virus

 <400> 17
 tatactagtt gagcggccgc ttattttag agtcatcca tgcc 44

 <210> 18
 <211> 43
 <212> DNA
 <213> Barley stripe mosaic

60-017200US sequence listing.txt

| | |
|---|-----|
| <400> 18 | |
| tatagagctc tacaaatcta gaatggctac tttctcttgt gtg | 43 |
| <210> 19 | |
| <211> 21 | |
| <212> DNA | |
| <213> Barley stripe mosaic virus | |
| <400> 19 | |
| agagtccgtt aagattcatg g | 21 |
| <210> 20 | |
| <211> 30 | |
| <212> DNA | |
| <213> Tobacco mosaic virus | |
| <400> 20 | |
| cattaattaa gatgatggct agcaaaggag | 30 |
| <210> 21 | |
| <211> 112 | |
| <212> DNA | |
| <213> Tobacco mosaic virus | |
| <400> 21 | |
| atatctagac ctaggaccag ggttagattc cacgtcaccc gccaaacttca gcaaatacaaa | 60 |
| attcaacagc tgtttgtaga gctcagcggc cgccttgat agctcatcca tg | 112 |
| <210> 22 | |
| <211> 98 | |
| <212> DNA | |
| <213> Tobacco mosaic virus | |
| <400> 22 | |
| tatactagtc agctgttgaa ttttgatttg ctgaagttgg cgggtgacgt ggaatctaac | 60 |
| cctggtcctg tcgacaaagg agaagaactt ttcactgg | 98 |
| <210> 23 | |
| <211> 49 | |
| <212> DNA | |
| <213> Tobacco mosaic virus | |
| <400> 23 | |
| tatgctagcg atcaattagc ggccgcttat ttgtagagct catccatgc | 49 |
| <210> 24 | |
| <211> 39 | |
| <212> DNA | |
| <213> Homo sapiens | |
| <400> 24 | |
| ggccgcttat ccgtatgatg ttccggatta tgccgagct | 39 |
| <210> 25 | |
| <211> 31 | |
| <212> DNA | |
| <213> Homo sapiens | |
| <400> 25 | |
| cggcataatc cggaacatca tacggataag c | 31 |
| <210> 26 | |

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<211> 42
 <212> DNA
 <213> Chicken

<400> 26
 ggccgctgaa caaaagctta tctctgagga agatcttgag ct 42

<210> 27
 <211> 34
 <212> DNA
 <213> Chicken

<400> 27
 caagatcttc ctcagagata agcttttggt cagc 34

<210> 28
 <211> 39
 <212> DNA
 <213> Cnidaria

<400> 28
 ggccgctcat catcaccatc accatcacca tcacgagct 39

<210> 29
 <211> 31
 <212> DNA
 <213> Cnidaria

<400> 29
 cgtgatgggtg atgggtgatgg tgatgatgag c 31

<210> 30
 <211> 32
 <212> DNA
 <213> Brome mosaic virus

<400> 30
 tattttaatta agatgtcgac ttcaggaact gg 32

<210> 31
 <211> 30
 <212> DNA
 <213> Brome mosaic virus

<400> 31
 tatgcggccg ccctataaag cggggtgaag 30

<210> 32
 <211> 33
 <212> DNA
 <213> Chicken

<400> 32
 tattttaatta agatgacttg ccagacttac aac 33

<210> 33
 <211> 31
 <212> DNA
 <213> Chicken

<400> 33
 tatgcggccg cgcaattgca tctcctctga g 31

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| | |
|--|----|
| <210> 34 | |
| <211> 34 | |
| <212> DNA | |
| <213> Bovine | |
| <400> 34 | |
| tattttaatta agatgaaggc tctcggttatt ctgg | 34 |
| <210> 35 | |
| <211> 30 | |
| <212> DNA | |
| <213> Bovine | |
| <400> 35 | |
| tatgcggccg ccagggtgca accctcaacg | 30 |
| <210> 36 | |
| <211> 38 | |
| <212> DNA | |
| <213> Homo sapiens | |
| <400> 36 | |
| tattttaatta agatgggaaa aatggcttct ctatttgc | 38 |
| <210> 37 | |
| <211> 33 | |
| <212> DNA | |
| <213> Homo sapiens | |
| <400> 37 | |
| tatgcggccg cgaaaccgca ggaaccttca acg | 33 |
| <210> 38 | |
| <211> 33 | |
| <212> DNA | |
| <213> Tomato | |
| <400> 38 | |
| tattttaatta agatggagtc aaagtttgct cac | 33 |
| <210> 39 | |
| <211> 32 | |
| <212> DNA | |
| <213> Tomato | |
| <400> 39 | |
| tatgcggccg cagtcaccac aggcatttgc ac | 32 |
| <210> 40 | |
| <211> 25 | |
| <212> DNA | |
| <213> Barley stripe mosaic virus | |
| <400> 40 | |
| atagatatcg atccccttat agtgc | 25 |
| <210> 41 | |
| <211> 34 | |
| <212> DNA | |
| <213> Barley stripe mosaic virus | |
| <400> 41 | |
| atagctagca agcatgcgaa ggtaaataca gtag | 34 |

60-017200US sequence listing.txt

```

<210> 42
<211> 46
<212> DNA
<213> Barley stripe mosaic virus

<400> 42
tatactagtt taattaagtc gaccatggct agcaaaggag aagaac          46

<210> 43
<211> 44
<212> DNA
<213> Barlesy stripe mosaic virus

<400> 43
tattctagat gagcggccgc ttatttgtag agctcatcca tgcc          44

<210> 44
<211> 46
<212> DNA
<213> Barley stripe mosaic virus

<400> 44
tatagagctc tacaaataat ctagaatggc tacttttctct tgtgtg          46

<210> 45
<211> 21
<212> DNA
<213> Barley stripe mosaic virus

<400> 45
agagtccggtt aagattcatg.g          21

<210> 46
<211> 35
<212> DNA
<213> Barley stripe mosaic virus

<400> 46
atataggtct cccatgatgg ctactttctc ttgtg          35

<210> 47
<211> 39
<212> DNA
<213> Barley stripe mosaic virus

<400> 47
tattaggtct cccatggcct tagaaacgga agaagaatc          39

<210> 48
<211> 35
<212> DNA
<213> Barley stripe mosaic virus

<400> 48
atataggtct cccatgatgg ctactttctc ttgtg          35

<210> 49
<211> 37
<212> DNA
<213> Barley stripe mosaic virus

<400> 49

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60-017200US sequence listing.txt

| | |
|---|-----|
| tattaggtct cccatggcag gaccagggtt agattcc | 37 |
| <210> 50 | |
| <211> 21 | |
| <212> DNA | |
| <213> Barley stripe mosaic virus | |
| <400> 50 | |
| ggaaagccgg cgaacgtggc g | 21 |
| <210> 51 | |
| <211> 58 | |
| <212> DNA | |
| <213> Barley stripe mosaic virus | |
| <400> 51 | |
| tatattcgaa tctagaatcg atgctagctt gcatgctgtg aagtggtaaa agaaatgc | 58 |
| <210> 52 | |
| <211> 35 | |
| <212> DNA | |
| <213> Tobacco mosaic virus | |
| <400> 52 | |
| atataggtct cccatggcta gcaaaggaga agaac | 35 |
| <210> 53 | |
| <211> 48 | |
| <212> DNA | |
| <213> Tobacco mosaic virus | |
| <400> 53 | |
| tattaggtct cacatgcatg ctctagattt gtagagctca tccatgcc | 48 |
| <210> 54 | |
| <211> 35 | |
| <212> DNA | |
| <213> Tobacco mosaic virus | |
| <400> 54 | |
| atataggtct cccatggcta gcaaaggaga agaac | 35 |
| <210> 55 | |
| <211> 100 | |
| <212> DNA | |
| <213> Tobacco mosaic virus | |
| <400> 55 | |
| ttaggtctca catgtctaga ggaccagggt tagattccac gtcacccgcc aacttcagca | 60 |
| aatcaaaatt caacagctgt ttgtagagct catccatgcc | 100 |
| <210> 56 | |
| <211> 35 | |
| <212> DNA | |
| <213> Tobacco mosaic virus | |
| <400> 56 | |
| atataggtct cccatggcta gcaaaggaga agaac | 35 |
| <210> 57 | |
| <211> 41 | |
| <212> DNA | |
| <213> Tobacco mosaic virus | |

60-017200US sequence listing.txt

| | |
|---|----|
| <400> 57 | |
| tattagaatt ctctagatta tttgtagagc tcatccatgc c | 41 |
| <210> 58 | |
| <211> 31 | |
| <212> DNA | |
| <213> Barley stripe mosaic virus | |
| <400> 58 | |
| tatactagta tggacatgac gaaaactggt g | 31 |
| <210> 59 | |
| <211> 31 | |
| <212> DNA | |
| <213> Barley stripe mosaic virus | |
| <400> 59 | |
| tatgctagct tatttggcct tgaaccaact g | 31 |
| <210> 60 | |
| <211> 31 | |
| <212> DNA | |
| <213> Barley stripe mosaic virus | |
| <400> 60 | |
| tatactagtc agctgttgaa ttttgatttg c | 31 |
| <210> 61 | |
| <211> 35 | |
| <212> DNA | |
| <213> Black hulless barley | |
| <400> 61 | |
| atattaatta actaaaccca tattgcttga ggcaa | 35 |
| <210> 62 | |
| <211> 35 | |
| <212> DNA | |
| <213> Black hulless barley | |
| <400> 62 | |
| tatgcggccg cctagtgtag tcaccagcta gatag | 35 |
| <210> 63 | |
| <211> 35 | |
| <212> DNA | |
| <213> Black hulless barley | |
| <400> 63 | |
| tatgcggccg cctactttca ggaggattac catcc | 35 |
| <210> 64 | |
| <211> 35 | |
| <212> DNA | |
| <213> Black hulless barley | |
| <400> 64 | |
| atattaatta actggatgaa aaagcagggt gttcc | 35 |
| <210> 65 | |
| <211> 32 | |
| <212> DNA | |

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<213> Corn leaf

<400> 65
atattaatta acatggacac tggctgcctg tc 32

<210> 66
<211> 35
<212> DNA
<213> Corn leaf

<400> 66
tatgcggccg cctacaaagc aatcaaaatg cactg 35

<210> 67
<211> 34
<212> DNA
<213> Corn leaf

<400> 67
atattaatta acaaggtagc tgcttggaag gatg 34

<210> 68
<211> 35
<212> DNA
<213> Corn leaf

<400> 68
tatgcggccg cctagcaggt tactgacatg tctgc 35

<210> 69
<211> 33
<212> DNA
<213> Corn leaf

<400> 69
atattaatta accagtgcac tttgattgct ttg 33

<210> 70
<211> 35
<212> DNA
<213> Corn leaf

<400> 70
tatgcggccg cctaagatgg gacgggaact tctcc 35

<210> 71
<211> 35
<212> DNA
<213> Nicotiana benthamiana

<400> 71
atattaatta acatgccccca aattggactt gtttc 35

<210> 72
<211> 35
<212> DNA
<213> Nicotiana benthamiana

<400> 72
tatgcggccg cctactaaac tacgcttgct tctgc 35

<210> 73
<211> 35

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<212> DNA

<213> Nicotiana benthamiana

<400> 73

tatgcggccg cctagggttt atgaagttaa gtgcc

35

<210> 74

<211> 35

<212> DNA

<213> Nicotiana benthamiana

<400> 74

atattaatta acaaggcact taacttcata aaccc

35